Getting more for taxpayers' dollars:

Government provision vs. government purchase of healthcare

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Abstract

Critics charge that Veterans Health Administration (VA) medical centers are inefficient and cost would be less if VA purchased care for its patients directly from private sector providers. We compare VA medical care expenditures with estimates of total payments under a hypothetical Medicare fee-for-service payment system reimbursing providers for the same counts of each service VA medical centers provided in fiscal 1999. At six study sites, hypothetical payments were over 20% greater than actual budgets. Nationally, this represented over $3 billion in 1999, over $5 billion in 2003. Data limitations suggest the estimate is conservative. Almost half of the difference is due to VA's low pharmacy costs. A policy to allow newly enrolled veterans to fill prescriptions written by non-VA physicians at VA pharmacies should increase this difference in the short run. Whether a Medicare pharmaceutical benefit will reduce veterans' use of this VA benefit will depend on the co-payment.

Key words: health care, costs, veterans, health policy

Word Count: 150

Government provision of goods and services is generally presumed to be economically inefficient (Stiglitz, 1986), but health economists believe that the method of financing (not providing) health care contributes most to inefficiency. Specifically, economists hypothesize that open-ended finance, with multiple payers and fee-for-service payment, provides little incentive for either public or private providers to control health care expenditure compared to closed systems, which are characterized by global hospital budgets and capitated outpatient care (Culyer and Newhouse, 2000). This hypothesis is one focus of analyses of international health expenditures and research to determine whether capitated managed care or health maintenance organizations have lower per capita costs than other forms of either private or public insurance (e.g., Feachem, Sekhri and White, 2002).

Closed- and open-ended health care systems co-exist in the United States, providing opportunities for comparisons of costs and outcomes under different organizational structures. In particular, the costs of health care systems funded through facility-based budgets can be compared to hypothetical costs under other funding mechanisms. Such facility-based-budget systems play an important role within the American health care sector by providing care for specific, often vulnerable, populations such as indigent or uninsured people (e.g., state-, county-, or city-owned hospitals), native Americans (Indian Hospital System), and veterans (Veteran's Health Administration [VA]) (Mobley, 1998; Walls, 1998; Sundwall and Tavani, 1991; Kunitz, 1996; Aday, 2001).

Periodic calls for change to public systems would convert their budgets to vouchers or other payment forms that would allow patients to use their benefits in the private health care sector (GAO, 2001; Gardner, 1998a; Reinhardt, 1999; Anonymous, 1997; Editorial, 1996; Gardner, 1998b; Fihn, 2001; Frankel, 2001; Iglehart, 1996; Farber, 1978; Moskowitz, 1995;

Thorsland, 2000; Pittman, 1995). Publicly funded, privately provided fee-for-service care might increase access, but it is not apparent that it would reduce expenditures for any of these systems (Friedman, 1997; Bindman, Keane and Lurie, 1990). Assessments of VA, for example, found its costs to be the same as or lower than private sector hospital costs over the past two decades, but methodological issues (e.g., not pricing outpatient services and the possibility of cost shifting) made these analyses less than definitive (Hendricks, Remler and Prashker, 1999). Transformations of the health care industry (e.g., through increased competition, managed care, prospective payment, movement from inpatient to outpatient services) also affect the validity of past comparisons. Building on a critical review of past methods, a team of medical information specialists and researchers with diverse expertise constructed methods to extend prior estimates to all VA services.

A new comparison of taxpayers' costs for VA-provided care under closed- and open-funding scenarios can help to focus debates concerning efficient ways to meet the country's legal and social mandate to provide health services for veterans. It also has implications for other public sector hospitals funded directly by governments. The comparisons provide information relevant to national discussions of Medicare pharmaceutical benefits and policy debates about national health care infrastructure.

Methods

New Contribution

This study expands upon prior cost studies of VA services by calculating hypothetical payments for all services provided by VA during an entire year. Comparing a full year of cost data to services provided during that year eliminates the impact of cost shifting that was not addressed in previous studies. The market value estimate of VA services was based on the

results of a micro-study performed at six medium-sized, university-affiliated, acute VA hospitals, chosen to provide a diversity of VA services and geographic locations (Albuquerque, NM; Birmingham, AL; Cincinnati, OH; Kansas City, MO; Milwaukee, WI; and Providence, RI). The six facilities included nursing homes (2), substance abuse and psychiatric domiciliary care (2) and spinal cord units (2), but not long term psychiatric care.

The micro-study was necessary for two major reasons: 1) significant amounts of care for which VA would have to pay separately under a fee-for-service system (e.g., ambulatory surgeries and contract care) are not consistently captured (or at least not easily identified) in its current computerized workload system and 2) significant amounts of care for which public and private payers would not pay separately under a fee-for-service system (e.g., chaplain visits) could be coded as if they were billable. Any comparison of the VA requires that the same bundle of services be priced under both funding systems. A comprehensive review of the methodology provides details for pricing seven major categories of services (Nugent and Hendricks, 2003).

Study assumptions included sufficient private capacity for VA to buy care at Medicare reimbursement rates and that the VA benefit package would remain the same. Medicare payment schedules were used as the standard for pricing VA services wherever possible because Medicare is a federal medical insurance program with a uniform benefit package across the nation and an existing mechanism for reimbursing health care providers nationally. VA's agreement with the Department of Health and Human Services to make VA "in effect, a Medicare+Choice option for veterans holding Medicare Part B" coverage supports the program's relevance to VA (Freedberg, 2003).

The hypothetical payment rates represented Medicare's total allowed amount including both the patient and Medicare portion (i.e., including any deductibles or co-payments for which Medicare beneficiaries would be responsible). Because of the complexity of Medicare reimbursement rules, payment strategies, and methods, an oversight committee that included VA and non-VA experts on health care costs and payment regulations reviewed and approved study protocols.

Micro-study Estimates

The study population included all veterans receiving care at the six study hospitals in fiscal year (FY) 1999. Estimated payments for Medicare-covered services were based on Medicare rates or surrogate prices if Medicare had no rates for the services (Table 1). For covered Medicare benefits (e.g., acute inpatient services), existing Medicare payment schedules were used, including geographic adjustments for each site. For VA services restricted under Medicare (e.g., pharmacy), we applied Medicare payment methodologies without the restrictions. For example, we assumed that Medicare's formula for discounting rates for pharmaceuticals applied to all prescriptions, not just the program's restricted list. For services not covered by Medicare (e.g., dental), we used rates from the most representative available providers (Staffs of the MDRC and the AHSR, 1996). Complexity of care was assessed using an admission-based measure for inpatient care (the 3M Company's APR-DRGs) and a population-based measure used to predict future health care resource utilization (DCGs) (Shen, 2003; Rosen, Loveland and Anderson, 2003).

Table 1: Summary of Payment Rates by Type of Health Care Service

Health Benefit	Payment Source Data	Payment Element	Payment Calculation
Acute Inpatient	1998 MEDPAR	DRG	Σ (VA DRG freq.)*(avg. DRG payment by area)
Rehabilitation	1998 MEDPAR	Per diem, TEFRA	Σ (Rehabilitation days)*(avg. rehab per diem)
Facility Fees	1997 MCR	MFS and RCC	Σ (CPT-4 freq.)(MFS) + (CPT-4 freq.)(RCC)
Pro Fees	1999 RVU	MFS	Σ (CPT-4 freq.)(MFS)
Nursing Home		Historical cost and RUGs	Σ (nursing home days)*(avg. per diem)
Domiciliary	1998 MEDPAR	APC 0033	Σ (days of care) (APC rate 0033)
Residential Care	1998 MEDPAR	APC 0033	Σ (days of care) (APC rate 0033)
Pharmacy	1999 RedBook	MAC and discounted AWP	Σ (NDC freq.) (MAC) + (NDC)(AWP – 5%)
Prosthetics	1998 DMEPOS	MFS	Σ (CPT-4 freq.)(MFS for each CPT-4)
Dental	1999 ADA	Discounted fee schedule	Σ (CPT-4 freq.)(ADA fee schedule at 75th%ile)

Note:

ADA = American Dental Association
APC = Ambulatory Payment Category
AWP = Average Wholesale Price
MAC = Medicaid Maximal Allowable Charge
MFS = Medicare Fee Schedule
NDC = National Drug Code
RCC = Ratio of Cost to Charge

Capturing Services

Computer records providing healthcare utilization were extracted for all veterans receiving services at the study hospitals from October 1, 1998 through September 30, 1999, VA's 1999 fiscal year (Dept of Veterans Affairs, 1998; Ingenix®, 2000). The utilization data from these files was used as the basis for developing Medicare payment data Converting information from VA's utilization-based system to equivalent Medicare-like billing data was a methodological challenge. A single Medicare admission leads to multiple claims (e.g., for the facility, attending physician, surgeon, anesthesiologist, consultants, and radiologist). In VA, an admission generates a single administrative record and many physicians' services are captured only in the patient's medical record. Similarly, VA outpatient records had to be separated to represent the multiple claims (e.g., for office visits, laboratory costs and other services) that would be generated by the same services under Medicare's fee-for-service system. Table 2 summarizes data sources and identifiers.

TABLE 2: Source of Data for VA Workload by Type of Health Care Services

Health Care Service	Workload Source	Workload Identifier
Acute Inpatient	NPCD (PTF)	ICD 9 CM
Rehabilitation	NPCD (PTF)	ICD 9 CM
Facility Fees	VistA, PCE	CPT 4 (RVU)
Professional Fees	VistA, PCE	CPT 4 (RVU)
Nursing home	NPCD521 (ECF)	ICD 9 CM
Domiciliary	NPCD (PTF)	ICD 9 CM
Residential Care	NPCD (PTF, PCE)	ICD 9 CM
Pharmacy	PBM	National Drug Codes
Prosthetics	NPPD	HCPCS
Dental	VistA, PCE	HCPCS

Note:
NPCD (PTF) = National Patient Care Database (Patient Treatment File)
VistA, PCE = Veterans Integrated Health Systems Technology Architecture (Patient Care Encounter)
NPCD (ECF) = National Patient Care Database (Extended Care File)
PBM = Pharmacy Benefits Management
NPPD = National Prosthetic Patient Database

As a result, it was necessary to augment the utilization data with information taken directly from medical records and inpatient and outpatient administrative files. Additional coding staff were provided to each study site to extract the workload of providers entitled to receive professional fees under Medicare.

Payment Calculations

Acute inpatient care was priced from the 1998 Medicare Provider Analysis and Review files (the most current available for the study), by applying average DRG-specific private sector payments (including disproportionate share, capital, etc.) in the six Metropolitan Statistical Areas (inflated to 1999) to FY 1999 patient discharges (Render, et al., 2003). Nursing home charges were computed using average Resource Utilization Group scores valued at Medicare's payment formula for 1999, which blended a new prospective payment rate with historical costs (Hendricks, Whitford and Nugent, 2003). We processed provider workload using commercial software with Medicare edit rules to estimate professional and facility fees (HEHS, 1997; Ingenix®, 2000; Roselle, et al., 2003).

VA outpatient pharmacy information was merged with average wholesale prices contained in the Redbook™ using National Drug Codes (Render, et al., 2003). A Medicaid maximum allowable charge if available or 95 percent of the average wholesale price was used to estimate payments. Dispensing fees were based on state Medicaid rates.

VA prosthetics workload was merged with Medicare geographic payment rates by HCPCS codes and multiplied counts of these items by Medicare payment rates (Render, et al., 2003). For non-Medicare-covered items (e.g., hearing aids) we estimated national payment rates by inflating VA costs by 30% because the lowest ratio of Medicare fee to VA cost across all of the prosthetic

items for which Medicare fees was 1.3 (i.e., 30% above the VA cost). Pharmacy and prosthetics payment calculations and findings were similar to those of other VA-Medicare comparisons (HHS, 1998; Fihn, 2000; Iha, et al., 2001; GAO 2000).

VA Cost

VA's Cost Distribution Report (CDR-RCS 10-0141) is a budget allocation system that distributes seven categories of costs from accounting and payroll records (Nugent, et al, 2003). Each fiscal year, the CDR is reconciled with accounting records and therefore accurately represents annual hospital expenditures. We adjusted aggregate FY 1999 CDR costs for the six study sites by adding corporate overhead, interest on capital assets (at the September 1999 long-term Treasury rate of 6.05 percent) and malpractice costs from the Tort Claim Information System. These adjustments accounted for 3.3 percent of VA costs.

National Estimates

One major methodological lesson from the micro-cost study was that VA utilization files undercount certain types of health care services, particularly the use of durable medical equipment and inpatient care by professional providers who could bill directly for those services under the Medicare program. To estimate the hypothetical payments for the entire VA, we consequently inflated some counts of care in the national database, assuming that the validated micro-study counts were representative of the experience at other VA medical centers.

For example, the six sites reported 18,043 disability-related examinations (verified as accurate), but the national databases contained only 13,348 visits for these same six sites. We used the ratio of the sites' count to the count in the national data [18,043/13,348 = 1.35] as a multiplier for the national count of these visits (220,746) at all VA medical centers in FY 1999. The resulting 298,391 visits [220,746*1.35] were priced to estimate what VA would likely pay

for such exams under an open-ended financial system. We similarly adjusted pharmacy and prosthetics costs in making national estimates.

National costs needed none of the proportional re-allocations of overhead across medical centers required by the micro-study (which included only the share of overhead for the six study sites). The national overhead is included in the national VA costs below. We added national costs of malpractice and interest on capital to the VA national budget.

Results

Micro-Study

The hypothetical payments for the VA services provided by the six study sites in FY 1999 plus VA's research and education budget was $973 million, almost 21 percent greater than the taxpayer's actual cost of $806 million (Table 3). Thus, VA's medical budget plus corporate overhead and the opportunity cost to the taxpayer of VA capital would have had to be $167 million more to purchase as much in the private health care sector as the six study sites provided in FY 1999.

TABLE 3: Market Value and VA Costs for Six Study Sites

Category of Cost	**Market Estimate (000s)**	**VA FY '99 Costs (000s)**
Inpatient Facility (VA + purchased acute care)	$ 221,558	$ 191,577
Nursing Home (VA + purchased care)	30,451	25,243
Rehabilitation + Partial Hospitalization	71,670	42,097
Total Institutional Inpatient	$ 323,679	$ 258,917
Professional fees (inc. malpractice)	$ 109,543	$ 93,165
Outpatient Diagnostic	192,184	174,863
Outpatient Care, Purchased[a]	19,855	19,855
Home Health Care, Purchased	5,284	5,284
Total Outpatient	$ 326,866	$ 293,167
Prosthetics/DME	49,769	30,600
Pharmacy	$ 200,757	118,811
Dental	12,832	8,299
Miscellaneous Benefits	19,795	31,584

Category of Cost	Market Estimate (000s)	VA FY '99 Costs (000s)
Total Other Patient Care	$ 283,153	$ 189,294
Trainee Salaries	$ 22,973	$ 22,973
Research Support	17,063	17,063
VA Overhead	0	24,937
Other Activities	$ 40,036	$ 64,973
Total – All Costs	$ 973,734	$ 806,351

a - Includes both professional and facility fees for services currently purchased from private sector providers

We estimate that acute inpatient expenditures at the study sites would be 15.6 percent higher at Medicare's private sector rates. Hypothetical payment for nursing home care would be about 21 percent more at Medicare rates. The greatest increase in taxpayer costs would come for purchases of outpatient pharmaceuticals, rehabilitation and partial hospitalization services. For outpatient pharmacy services, the budget would need to be 69 percent more if veterans filled their prescriptions at payment rates set according to Medicare's existing formula. Similarly, in the private sector, the budget would have been 70 percent higher to provide rehabilitation and partial hospitalization services for the veterans treated at the six study sites and 55 percent higher for the same dental care.

Only "Miscellaneous Benefits," which includes travel payments, readjustment counseling, and other centralized benefits, have a VA cost estimate exceeding the hypothetical private sector estimate. The difference represents costs the study sites assigned to this account that could not be directly linked with health care services that could be priced in the private sector.

We estimated what patients might pay under a Medicare benefit package compared to VA benefits: the value of VA services that are not covered by Medicare plus estimated deductibles and co-payments for services that are covered benefits under Medicare. Table 4 summarizes this value to the patients of the VA benefit package compared to a Medicare benefit

for the same services. Veterans trying to purchase the same bundle of services under Medicare benefits would have been liable for at least $378 million, 39 percent of the total hypothetical payments. The majority of this burden would have been for pharmaceuticals. Taxpayers would still be liable for $595 million of these services under a Medicare benefit package, only $211 million less than it is with the VA. This estimate presumes that other government programs such as Medicaid would not assume this burden for indigent veterans.

TABLE 4: Estimated Patient Liability Under Medicare Benefits, Study Sites

Primary Category	Estimated Payments (000s)	Patient Liability				Taxpayer Liability
		Deductible	Co-pay	Non-Covered	Total	
Institutional Inpatient (VA + purchased acute)	221,558	18,813	429	13,414	32,656	188,902
Nursing Home (VA + purchased care)[a]	30,451	a	4,744	0	4,744	25,707
Rehabilitation + Partial Hospitalization	71,670		5,558	17,691	23,249	48,421
Professional Fees	109,543		21,909	0	21,909	87,634
Outpatient/Diagnostic	192,184	13,800	38,437	0	52,237	139,947
Outpatient care, Purchased	19,855		3,971	3,977	7,948	11,907
Home Health Care Purchased	5,284		458	2,996	3,454	1,830
Prosthetics/DME	49,769		5,848	8,282	14,130	35,638
Pharmacy [b]	200,757		0	192,727	192,727	8,030
Dental	12,832			12,832	12,832	0
Miscellaneous Benefits	19,795			12,664	12,664	7,131
Other Activities	40,036					40,036
Total $	973,734	32,613	81,354	264,583	378,550	595,183

[a] Computation of Medicare co-pays and deductibles for VA provided nursing home care required individual patient tracking and Medicare utilization throughout the course of the study. We did not design our data extraction system to capture this level of detail.

[b] Co-payments were calculated on purchased nursing home care. Medicare Beneficiary Survey data show that Medicare enrollees pay for ~96 percent of pharmacy costs. We estimated patient liability as 96 percent of estimated payments.

National Results

Nationally, the VA's medical care costs in FY 1999 were $18.8 billion (Table 5). Our estimated hypothetical payments were $22 billion. That is, hypothetical Medicare-based payments were 17 percent higher than the VA budget including overhead, the opportunity cost to the taxpayer of VA capital, and malpractice in FY 1999. If VA enrollees were converted to coverage under Medicare payment rules but with the same budget as VA currently has, services would necessarily be reduced. Areas where the budget differences might be greatest are for outpatient pharmaceuticals, prosthetics, rehabilitation, and partial hospitalization.

TABLE 5: National Estimated Market Value and VA Costs

Category of Cost	Market Estimate (000s)	VA FY '99 Costs (000s)
Institutional Inpatient (VA + purchased acute care)	$4,752,897	$ 5,278,716
Nursing Home (VA + purchased care)	2,096,365	1,537,171
Rehabilitation + Partial Hospitalizations[a]	1,267,812	558,921
Total Inpatient	$ 8,117,074	$ 7,374,808
Professional fees (inc. malpractice)	$2,387,245	2,089,313
Outpatient Diagnostic	5,666,978	3,988,826
Outpatient Care, Purchased	387,791	387,791
Home Health Care, Purchased	159,583	159,583
Total Outpatient	$ 8,601,597	$ 6,625,513
Prosthetics/DME	847,669	449,013
Pharmacy	3,020,589	1,769,707
Dental	234,217	175,062
Miscellaneous Benefits	459,548	548,996
Total Other Patient Care	$ 4,562,023	$ 2,942,778
Trainee Salaries	372,210	372,210
Research Support	396,165	396,165
VA Corporate Overhead		405,637
Interest on VA Assets		695,022
Other Activities	$ 768,375	$ 1,869,034
Total – All Costs	$ 22,049,069	$ 18,121,133

a. Includes domiciliary lodging in VA budget

If estimates of patient liability under Medicare presented in Table 4 were applied nationally, veterans would be responsible for $8.6 billion of the $22 billion for private sector

costs of this care if it were provided as a Medicare benefit with current deductibles, co-payments and coverage limitations. Taxpayers would pay $13.5 billion, about $5.4 billion less than their payments for the VA in 1999.

Confidence in the Estimates

Possible Overstatement of Hypothetical Estimates

The estimated cost of VA care under a hypothetical VA-Medicare program using private sector providers may be either overstated or understated, even given the study's restrictive assumptions. There are two major reasons for possible overstatement. First, we used Medicare rather than Medicaid payment rates for nursing home care. The Medicare skilled nursing benefit is tied to discharge from an acute hospital stay and covers those patient categories that reflect post-acute rather than longer-term care. Post-acute care is more service intensive and therefore more costly. While a majority of VA nursing home patients would meet the criteria for this benefit, many receive longer-term nursing care. The hypothetical payments for their care might be more appropriately set using Medicaid rates. Although there are no national Medicaid rates, our sensitivity analyses 1999 Medicaid Statistical Information System per diems for care provided to VA patients enrolled in Medicaid programs suggest this VA care might be purchased at 50% to 60% of our estimates (Hendricks, Whitford and Nugent, 2003).

A second reason to think the estimates are overstated is that the Medicare reimbursement for certain pharmaceuticals (average wholesale price (AWP) minus 5 percent) was very high compared to private sector plans. However, a very deep average discount of 40 percent from AWP would still be 15% higher than actual VA expenditures (Render, et al., 2003).

Possible Understatement of Hypothetical Estimates

The cost burden to taxpayers resulting from the hypothetical change to the VA system may be understated here due to: 1) more intensive practice patterns in the private sector resulting in reimbursements for more procedures or multiple private sector admissions for non-urgent health problems; 2) the assumption that private sector rates would be unchanged despite greater severity of illness for the VA patient population; 3) workload that is undocumented in the VA system but billed separately under Medicare; 4) the relaxation of VA's strict formulary for medications, and 5) increased utilization due to expanded access to eligible veterans who are currently not enrolled in VA.

The assumption that care provided for veterans in a fee-for-service model would be the same as that provided at VA facilities is problematic because market forces and medical practice patterns differ. The extrapolation of payment for VA health care services to private sector providers with different incentives, different cost structures, and different types of facilities makes it difficult to predict with certainty VA enrollees' use of services in the community. For example, despite similar rates of mortality, veterans receiving care paid for under Medicare were more likely to have invasive procedures including cardiac catheterization, coronary bypass surgery, and percutaneous transluminal angioplasty than VA patients (Wolinsky, et al., 1985).

Differences in risk pools and utilization of services also have a direct bearing on health-related costs. There are some similarities between how VA patients and the Medicare population use health care services, but patients cared for by the VA tend to be at higher risk for greater cost given their lower educational status, lower socioeconomic bracket, generally poorer health (self reported), greater likelihood of being out of the labor force, and reduced family support (Randall,

et al., 1987). Each of these characteristics could understate the potential cost of these patients due to higher rates of serious illness, mortality, lengths of stay, and psychiatric hospitalization.

Private sector hospitals have invested in staffing and automated tools to increase billing effectiveness; conversely, the VA's information system is clinically oriented, patient centered and lacks private sector applications to maximize billing. Consequently, we could not price many services, especially at the national level, for which a private sector system would charge (Nugent, et al., 2000). For example, the VA's databases do not capture multiple episodes for reimbursable procedures such as a radiation therapy, chemotherapy and transfusions. This workload was lost for purposes of our estimation, as were prosthetic limbs manufactured on-site and sub-acute care provided during acute admissions. This difference and the previously reported practice of transferring selected patients from the private sector to the VA (Hurley, Linz and Swint, 1990) may contribute to an underestimate of the cost liability of privatizing VA care.

Some differences between VA costs and the estimated private sector payments reflect the VA's unique negotiating positions within local markets or as a national buyer of hearing aids, other assistive devices, or pharmaceuticals. For example, each participating hospital had local contracts negotiated below Medicare payment rates that could disappear (e.g., for nursing home care). Conversely, VA's medication costs have risen in the past when Congress tried to reap the same discounts for the Medicare program (Iglehart, 1996; HHS, 2001; HHS, 1998). Pharmacy costs would also likely increase without VA's formulary unless a privatized veteran benefit incorporated the strict limits it imposes on VA physicians.

Developing controls and monitoring systems necessary to implement a VA fee-for-service model of health care would be costly, even if VA benefits were incorporated into the Medicare program. We have not included the 3 percent of costs that Medicare incurs for administering

benefits. We also did not address the effect a fee-for-service or voucher model would have on utilization of health care services by the 6 million veterans who are currently eligible for VA health benefits but who have not enrolled or used the systems.

Discussion

Our multi-site study to examine the amount of health care VA could buy in the private sector extrapolated detailed cost data gathered from six university-affiliated VA medical centers to national costs. If the current VA structure were replaced by a privatized care system, such as an expanded Medicare program, we assumed that all veterans currently eligible for care by the VA would automatically be eligible for coverage by federal funds under the hypothetical Medicare plus VA program.

The hypothetical payments for VA health care services were at least 17 to 20 percent higher than the cost of the VA system itself, 97 percent of which is borne directly by the taxpayer. There are reasons to think that the hypothetical payments could be over- or underestimated, but on balance we believe they underestimate what VA would face under the hypothesized system.

While the hypothetical payments of virtually all service categories are higher than VA's own costs, the greatest differences are in areas such as pharmacy and dental care where enrollees' options for private coverage are costly or not readily available. The pharmacy savings are from price reductions alone, ignoring the potential savings from the VA's strict formulary (Huskamp, et al., 2003). The analysis compared VA's own payments for each pharmaceutical to published average wholesale prices discounted according to Medicare regulations.

These overall savings demonstrate that the VA is able to provide a richer benefit package at lower cost than U.S. veterans would be able to obtain through the private sector under

Medicare fee-for-service programs. Expanding access to care through private sector providers would cost taxpayers at least $3 billion more for current enrollees' care. Other studies strongly suggest that these savings from a government hospital system do not come at the expense of quality care (Molley, et al., 1999; Petersen, et al, 2000;Wright, et al., 1997).

We estimated what the deductibles, co-payments, and non-covered costs for current Medicare enrollees would be for the same bundle of services as VA enrollees received in FY 1999. We found that the $974 million hypothetical payments for the six micro-study sites would be split between taxpayers (61 percent) and beneficiaries (39 percent) with the taxpayer (through the hypothetical Medicare plus VA program) paying approximately $595 million and the veterans or their private Medigap policies paying $378 million. At the national level, this division of costs implies that providing care for eligible veterans through the VA rather than Medicare saves veterans $8.6 billion (from Medicare co-payments and uncovered services (which would require out-of-pocket payments) included in the $22 billion estimate).

Another national implication of privatizing VA health care is the reconfiguration that would be required for medical residencies. VA's current 8,700 graduate medical residencies account for almost 9 percent of the medical residency positions in the country (Brotherton, et al., 2000). If these residencies are absorbed by private sector hospitals, Medicare payments for non-VA beneficiaries would likely rise as a result of indirect medical education payments under current Medicare reimbursement formulas.

Given the importance of VA's low outpatient pharmaceutical costs to the differences estimated by this study, how might pharmaceutical policy changes affect these estimates? Consider three such policy changes: 1) allowing enrolled veterans to fill prescriptions written by non-VA physicians directly at VA pharmacies, 2) enacting a Medicare pharmacy benefit, and

3) allowing Americans to fill their prescriptions abroad. The first of these changes (allowing enrolled veterans to fill non-VA prescriptions directly at the VA) is currently being tried nationally. It should increase the estimates of cost savings from direct provision by VA in the short run. If the policy were extended beyond newly enrolled veterans on waiting lists for VA care, it would also increase VA's need for a larger appropriation.

The impact of a Medicare pharmacy benefit would depend on more than the co-payment structure in the final legislation. In our study, the average annual outpatient VA pharmacy cost for VA outpatients was less than $500, implying an average above $800 under Medicare pricing regulations at that time. With inflation to 2003 prices, this average underscores the adverse selection VA faces in attracting patients with the fewest alternatives for health care and above-average health care needs. Compared to many alternative pharmacy plans, VA offers the most for the lowest cost.

Filling prescriptions abroad may be more attractive than enrolling in VA, if veterans seek pharmaceuticals that are not on the standard formulary. For most standard prescriptions, however, the $7 per month co-payment will continue to be more attractive and mail-out service will be more convenient.

Finally, our study demonstrates the potential savings to patients and taxpayers of a health care system directly funded by a government agency. These conclusions are not generalizable to other such systems unless they have similar characteristics such as provision of outpatient as well as inpatient care, specialty as well as general acute care, and an ability to negotiate substantial discounts for pharmaceuticals. The private sector value of these systems could be estimated, however, using methods similar to those described.

This study has at least two implications for other public health care systems. First, evaluating public systems by comparing them to private institutions requires a system-wide comparison that captures all of the services provided under the public budget. Even within a system with records as computerized as VA, this was a mammoth undertaking. Second, evaluations must recognize other ramifications of changes in the systems. For VA these include changing aspects of medical education; for other systems, expanding access will have financial ramification for private providers.

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